

DEPARTMENT OF COMMUNITY SERVICES
PLANNING DIVISION
TOWN OF WEST HARTFORD
50 SOUTH MAIN STREET
WEST HARTFORD, CT 06107-7431

WEST HARTFORD, CT 06107-2431 TEL: (860) 561-7555 FAX: (860) 561-7504 www.westhartford.org

PERMIT APPLICATION FOR INLAND WETLANDS & WATERCOURSES ACTIVITY: (check one of the following)

MAP AMENDMENT	REGULATED ACTIVITY
File # 1047 Application Fee 517	O Surcharge Fee \$60 Date Received 6.17.16
Street Address of Proposed Application:	14 Wateraide Lane
Zone: 2-10 Acreage/Lot Area	0.68 Parcel/Lot# 5951 2114 0001
Applicant's Interest in Property:	truction Management
Brief Description of Proposed Activity:	an in-ground salt water
Approximately 2	
constitutes permission and consent to Comm given the Connecticut Department of Public H.	tements contained herein and in all supporting documents to the ermore, the applicant agrees that submission of this document dission and Staff inspections of the site. Note: Notice is hereby ealth must be notified by applicants for any project located within watershed area. (CTDPH website at http://www.dph.state.ct.us)
Linda Ctoldforb ET AL Record Owner's Name	Applicant's Name
Street Lane	Street Brook St.
West Hartford CT 06107 City State Zip	West Hartford CT OGIO City State Zip
(860) 521-0076 Telephone #	860-232-2225 Telephone#
Contact Person:	email: clay ton@ hazpros.com
Michelle Gold forb	Applicant's Signature Claylon Kilbourn
Street Lane	Signature of Owner/Authorized Agent
West Hartford CT 06107	Clayton Kilbourn
City State Zip	DECEN
(£60) 202-3986 Chebge Telephone # E-Mail U:sd/TPZ/Templates/TWWAPermitApplication_April13	Idforb @ gnail. com
	PLANTING & ZONING DIVISION



Haz-Pros, Inc. 125-A Brook Street West Hartford, CT 06110 (860) 232-2225

> Pool Project For Goldfarb Family 114 Waterside Lane

Scope of work:

Install an in-ground steel wall vinyl lined residential swimming pool with dimensions of 22' 6' wide and 36' in length – 560 square feet. The pool is manufactured by Latham International and is sold by Baystate Pool Supplies located at 1360 Blue Hill Avenue in Bloomfield CT. The Latham International in-ground steel wall swimming pool consists of steel wall panels, steel frames/supports, vinyl liner and associated accessories – pool steps, skimmer, filters and lighting. Steel panels are comprised of No. 14 gage (minimum 0.068/1.75 mm) base-metal thickness steel sheets complying with ASTM (Type B) with coating designation Z700. Steel frames and supports are No. 12 gage (minimum 0.097 inch (2.46 mm) base-metal thickness cold-rolled steel complying with ASTM A 653 (Type B) with coating designation Z720. The vinyl liner is a flexible polyvinyl material that has a minimum thickness of 20 mils (0.51 mm). The pumping, filtration and heating systems will be placed on the North side of the house and the PVC piping will be brought down to the pool in an 18 inches deep 30 inches wide trench. Play scape will be removed from site.

This will be a "salt water" based swimming pool versus a factory created chlorine one. The salt water science behind this safe technology lies within the Salt Chlorine Generator. As pool water passes through the generator the unit generates a safe low-voltage current that converts the salt in the water into fresh pure chlorine. This water is evenly dispersed throughout the pool via the return jets. By using the salt water system increased safety is achieved because there is no handling or storage of toxic chemicals, no harsh shocking is necessary and there will be no caustic or harmful by-products from the factory made chlorine. The pool is winterized by blowing the water in the piping system into the pool and plugging pipes. No reduction of water is needed nor will any water be siphoned off onto the property. There will also be a waterfall made of nature stone boulders with a vinyl liner that will cascade into the pool. It will be 7 feet wide and 15 feet long and will have its own water pump system.

Surrounding the pool will be a 1,380 square foot patio which will tie into the pool cement coping. The patio will have 12 inch processed gravel and stone base with a tumbled paver placed on top and the joints will be filled with polymer sand to ensure stability. There will be a 30 foot wall made of New England fieldstone with a concrete center binder that will be West/adjacent to the pool patio. Additionally a landscaped area 3 to 4 feet wide and 70 feet in length will be installed on the East side of the pool patio to help control any pool water runoff or splashing from the pool. There will be buff granite stairs with paver landings from the pool area to the rear of the house. 12 inch processed gravel and stone dust will be under the stairs and paver landings.

Accessing the construction area:

All equipment, materials and related vehicles will enter the property from Waterside Lane and proceed East up the driveway and enter the backyard on the North side of the house. There will be a construction pad on the North side of the house that will be 30 feet in length and 12 feet wide.

Sedimentation and Erosion Control Notes:

- 1. All erosion control measures will be constructed in accordance with the "Guidelines for Soil Erosion and Sediment Control" by The Connecticut Council for Soil and Water Conservation.
- 2. Hay bales, if used, are to be butted tightly end to end and staked in place using two 2" X 2" X 36" wooden stakes per bale.
- 3. All erosion control measures are to be maintained, or replaced, during construction as necessary.
- 4. Contractor is responsible for implementation of all soil erosion and sedimentation control measures shown on these plans. This responsibility includes implementation as well as maintenance. Any proposed changes to this plan must be approved by the engineer and/or the proper town agency.
- 5. Hay bales to be placed so that string does not come in contact with the ground.
- 6. Erosion and sedimentation control measures will be installed prior to construction, wherever possible.
- 7. Areas to be left bare for more than 15 days shall be treated with air dried wood chip mulch or seeded with perennial rye-grass until final grading and stabilization is to take place.
- 8. Additional erosion control measures shall be installed during construction if deemed necessary or ordered by the project engineer or proper town agent.

Sequence of Construction:

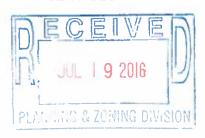
- 1. Install Silt fencing and construction pad as per the Connecticut Guidelines for Soil Erosion and Sedimentation Control as of the 2002 publication.
- 2. The area to be excavated will be marked in the field. Remove play scape.
- 3. The area of the pool and coping to be leveled.
- 4. Excavation to proceed and all excess material to be removed from the site.
- 5. Footings of the pool to be formed and poured.
- 6. Install vinyl liner and fill with water.
- 7. Backfill with process gravel.
- 8. Hook up mechanicals.
- 9. Final grading for pavers and any retaining walls.
- 10. Secure all pool fencing.
- 11. Stabilize all disturbed areas.
- 12. Remove all E & S control measures.

Reasonable and Prudent Alternatives:

The location was chosen because it's the flattest area of the backyard and the closer to the house the more excavation of the ground would be needed increasing the disturbance of the ground and sedimentation.



DEPARTMENT OF COMMUNITY SERVICES



July 19, 2016

TO: Catherine Dorau, Associate Planner

FROM: Charles R. Guarino, Civil Engineer II

SUBJECT: 114 Waterside Lane

The grading, drainage and erosion control aspects of the plan dated 6/9/16 last revised 7/18/16 are acceptable.

CRG:sr

C: Duane J. Martin, P.E., Town Engineer



DEPARTMENT OF COMMUNITY SERVICES



July 14, 2016

TO:

Catherine Dorau, Associate Planner

FROM:

Charles R. Guarino, Civil Engineer II

SUBJECT:

114 Waterside Lane

We are in receipt of a letter from North Star Surveying and Engineering to Mr. Clayton Kilbourn Dated 7/10/16, received in our office on 7/12/16. Two stand pipes have been installed in the vicinity of the proposed pool which show the ground water table to be 6" below the proposed pool excavation. Therefore the applicant does not anticipate having to dewater the excavation. However due to rain events or unexpected ground water intrusion a note shall be added to the plan noting that any pumping (dewatering) of the excavation must incorporate a pumping settling basin in conformance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control Manual.

CRG:sr

C: Duane J. Martin, P.E., Town Engineer







July 13, 2016

Cathy Dorau
Associate Planner
Department of Community Services
Town of West Hartford
50 South Main Street
West Hartford, CT 06107

Re: Proposed in-ground pool at Goldfarb property 114 Waterside Lane, West Hartford, CT

Dear Ms. Dorau,

This letter will confirm that the Woodridge Association Board of Directors has reviewed and approved the application by the Goldfarb family to install an in-ground salt-water pool on their property.

We appreciated the Goldfarb's presentation that outlined the steps that they were going to take during the construction and after the project's completion to control the erosion, sedimentation and any possible run-off.

We did raise questions regarding protections to keep the pool water separate from Wood Pond and endorse the steps they outlined including the installation of a berm, location of the pool mechanical equipment and use of a tanker truck to drain the pool should repairs be necessary.

We were encouraged by their desire to ensure that the project does not have a negative impact on the Associations' water bodies and thus voted to endorse the project.

Your assistance in encouraging our members to include the Association in the discussion of this project is appreciated. Should you need any additional information or further clarification, please feel free to contact me at 860-561-4825.

Sincerely,

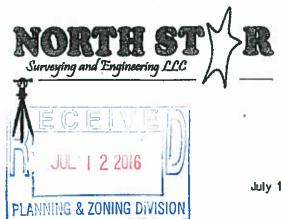
Leland J. Brandt

President

71 Waterside Lane

West Hartford, CT 06107

C: charles Guarini



July 10,2016

Established 1897 by C. B. Vorce Spencer & Washburn 1903-1931 Petersen & Hoffman 1931-2005

Richard P. Martel L. S., P. E.

Mr. Clayton Kilbourn Haz-Pros, Inc. 125-A Brook Street West Hartford, CT 06110

RE: Ground Water borings at pool location.

Dear Mr. Kilbaurn:

The purpose of this letter is give the results if testing for ground water levels at the location of the proposed pool as shown on the accompanying sketch for the proposed pool at 114 Waterside Lane.

Two borings were made and 1" perforated PVC satisfies were installed on 7—7—16.

Readings for groundwater were taken the following day with the results posted on the attached sketch.

Excavation for the pool is expected to be 8.5' to 9.0'. Even with a small overdig, groundwater should not impose a consideration with the pool excavation/construction.

Repectfully Submitted

Richard P. Martel LS & PE



114 Waterside Lane

ground el. depth of boring depth to ground water el. ground water	Boring 1 104' 8.5' dry - 94'	Boring 2 102' 10.0' 8.5' 93.5'
pool excav. el.	94'	94'
	đepth of boring depth to ground water	ground el. 104 ^f depth of boring 8.5 ^f depth to ground water dry el. ground water —

LIMIT OF THE UPLAND REVIEW AREA gal. e tanks boring 1pool pump,filter -70°± 1.f. bermed landscaping 3' to 4' wide prop. waterfall 322'±(DEED 315'±) doring 2 ch, see note 110 POOL EI 103' (22.5'X36') WOOD POND (WOODRIDG 4'wide paver walk -112 EXISTING HOUSE No. 114 FF 113.1' WETLAND LIMIT TAKEN AS EDGE OF POND 2'55" E

C. C. Kilhourn

DEPARTMENT OF COMMUNITY SERVICES

July 12, 2016

TO:

Catherine Dorau, Associate Planner

FROM:

Charles R. Guarino, Civil Engineer II

SUBJECT:

114 Waterside Lane

Based on my review of the plans titled "Wetland Regulated Activity Zoning Location Map Dependent Resurvey Prepared for: Linda H. Goldfarb, et al 114 Waterside Lane West Hartford, Connecticut Date 06/09/16 Revised 7/5/16", I offer the following engineering comments:

CZG

- 1. The bottom of the proposed pool is at elevation 95, to allow for gravel and sand below the liner the excavation will be down to approximately elevation 94. If the bottom of the pool excavation is below the pond surface elevation a dewatering plan is required. The water surface elevation of Wood Pond must be labeled on the plans.
- 2. The easterly street line of Waterside Lane needs to be shown on the plans.

CRG:sr

C: Duane J. Martin, P.E., Town Engineer







June 24,2016

Established 1897 by C. B. Vorce Spencer & Washburn 1903-1931 Petersen & Hoffman 1931-2005

Richard P. Martel L. S., P. E.

Mr. Clayton Kilbourn Haz-Pros, Inc. 125-A Brook Street West Hartford, CT 06110

RE: Wetlands Application for 114 Waterside Lane in West Hartford.

Dear Mr. Kilbourn:

This letter is to further address the inpact of the construction and placement of the proposed pool at 114 Waterside Lane.

The short term effects of the construction of the pool would be minimal, if any, if the soil erosion and sedimentation control measures are properly placed and maintained.

The long term effects would be for an increased amount of run-off to the lake. This is in

consideration of the capture effect of the pool itself and run—off of the pavers.

The water quality of the run—off from the pavers would be of a higher quality than from any lawn area. In all, there would be an advantage to the for the lake and allowing for a fuller use and enjoyment of the property.

Repectfully Submitted

Richard P. Martel LS & PE

Catherine Dorau

From:

Clayton Kilbourn <clayton@hazpros.com>

Sent:

Wednesday, June 29, 2016 9:04 AM

To:

Catherine Dorau

Subject:

RE: 114 Waterside Lane IWW #1047 Engineering Comments

Good morning – I'm having boring company meet myself and Rick at the property July 7th to bore where the deep end of the pool will be. We need 9 feet to clear the bottom of the deep end. Hoping all goes well if not we will reevaluate our options....

Clayton Kilbourn
President
Haz-Pros, Inc.
125-A Brook Street
West Hartford, CT 06110
Phone (860) 232-2225 x 8
Fax (860) 233-9654
www.hazpros.com

From: Catherine Dorau [mailto:cdorau@WestHartfordCT.gov]

Sent: Wednesday, June 29, 2016 8:59 AM

To: 'Clayton Kilbourn'

Cc: Todd Dumais; Brittany Bermingham

Subject: RE: 114 Waterside Lane IWW #1047 Engineering Comments

Clayton,

Sounds like CEC had the same concern as one of Charles Guarino's comments* –

*The bottom of the proposed pool is at elevation 95 (assumed datum) to allow for gravel and sand below the liner the excavation will be down to approximately elevation 94. The water surface elevation of Wood Pond must be labeled on the plans. If the bottom of the pool excavation elevation is below the pond water surface elevation a dewatering plan is required.

Since this will be in CEC's minutes and Engineering comments to the IWWA – it is good to address before the meeting. It would help to have a memo to accompany the revised plan – describing how you've addressed Engineering and CEC's comments.

Thank you, Cathy

Catherine Dorau

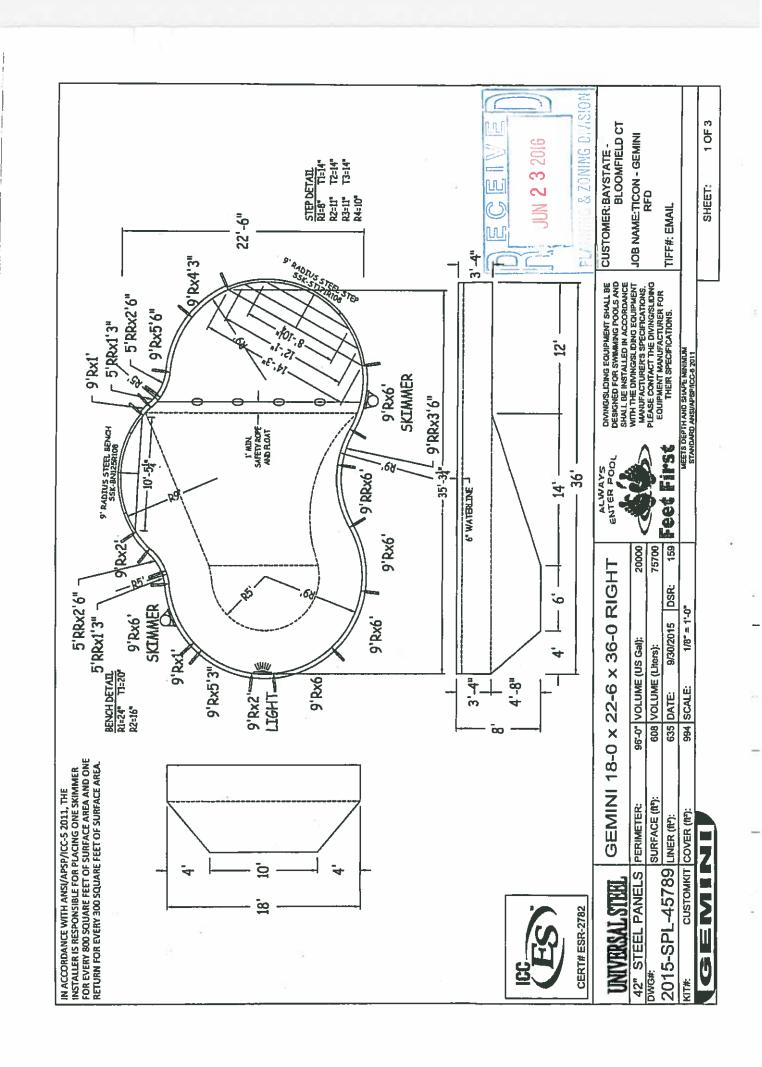
Associate Planner

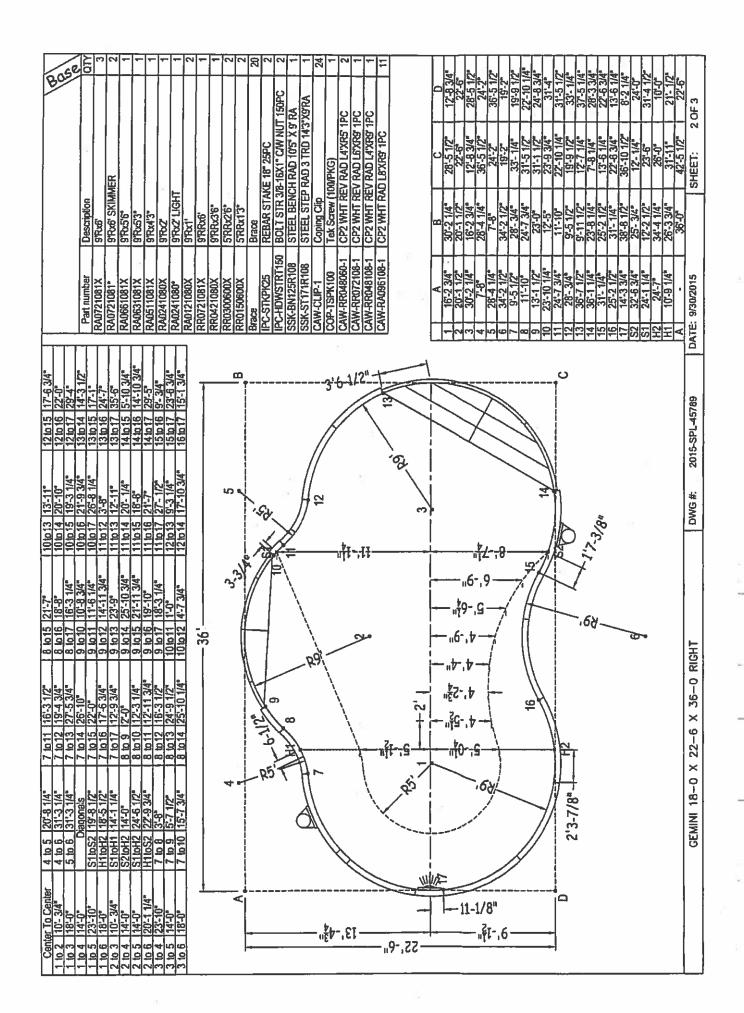
Town of West Hartford

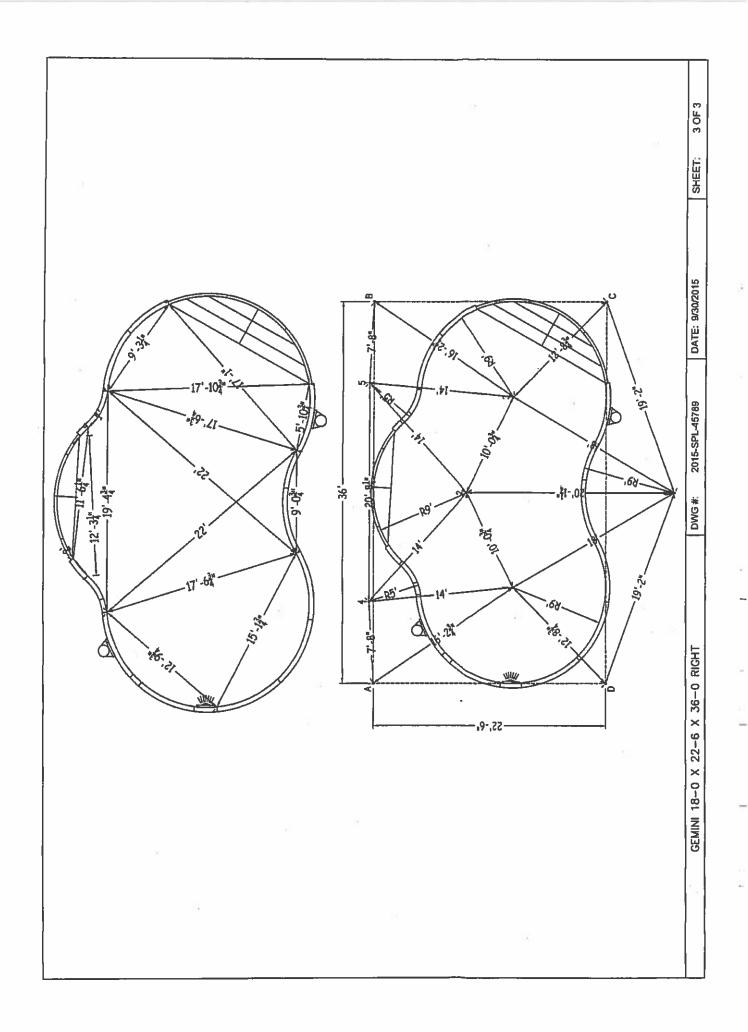
Department of Community Services: Planning and Zoning Division

50 South Main Street, Room 214 | West Hartford, CT 06107 | ph 860.561.7554 | f 860.561.7504

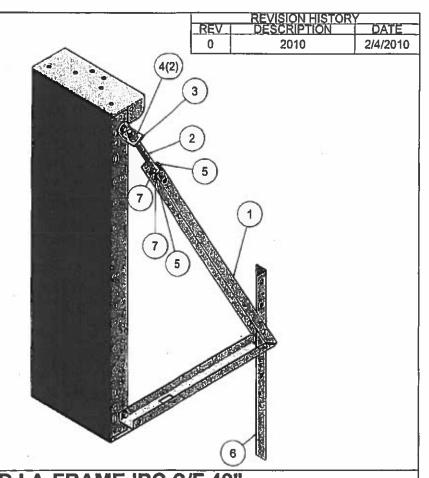
New Email: cdorau@westhartfordct.gov







	I	Parts List
ITEM	QTY	PART NUMBER
1	1	SWP-AAF1PCC-42
2	1	IPC-AAFTROD
3	1	IPC-AAFCLIP
4	2	IPC-HWHNUT5/8
5	2	IPC-HWFBLT3/8-D
6	1	IPC-DRVSTK12G
7	2	IPC-HWFNUT3/8





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ICC-ES Report

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ESR-2782P

Reissued 04/2016 This report is subject to renewal 04/2018.

DIVISION: 13 00 00—SPECIAL CONSTRUCTION SECTION: 13 11 13—BELOW-GRADE SWIMMING POOLS

REPORT HOLDER:

LATHAM INTERNATIONAL

787 WATERVLIET-SHAKER ROAD LATHAM, NEW YORK 12110

EVALUATION SUBJECT:

LATHAM INTERNATIONAL STEEL WALL VINYL-LINED RESIDENTIAL **SWIMMING POOLS**



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*2014 Recipient of Prestigious Western States Seismic Policy Council (WSSPC) Award in Excellence"



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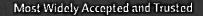


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ICC-ES Evaluation Report

ESR-2782P

Reissued April 2016

This report is subject to renewal April 2018.

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DIVISION: 13 00 00—SPECIAL CONSTRUCTION Section: 13 11 13—Below-Grade Swimming Pools

REPORT HOLDER:

LATHAM INTERNATIONAL 787 WATERVLIET-SHAKER ROAD **LATHAM, NEW YORK 12110** (518) 951-1000 www.lathamint.com roneastman@lathamint.com

EVALUATON SUBJECT:

LATHAM INTERNATIONAL STEEL WALL VINYL-LINED RESIDENTIAL SWIMMING POOLS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2006 International Building Code® (IBC)
- 2006 International Residential Code® (IRC)
- 1997 Uniform Building Code™ (UBC)

Properties evaluated:

- Physical properties
- Durability

2.0 USES

The Latham International In-ground steel wall vinyl-lined residential swimming pools are permanently installed for recreational use as swimming pools in residential applications with water circulated through a filter in a closed system. The pools comply with ANSI/NSPI-5 as Type 0 pools as noted in Table 1.

3.0 DESCRIPTION

The Latham International in-ground steel wall swimming pools consist of steel wall panels, steel frames and supports, vinyl liners, and associated accessories (e.g., pool steps, copings, skimmer, filters, and lighting). Steel panels are comprised of No. 14 gage [minimum 0.068 inch (1.75 mm)] base-metal thickness steel sheets complying with ASTM A653 (Type B), with coating designation Z700. Steel frames and supports are comprised of No. 12 gage [minimum 0.097 inch (2.46 mm)] base-metal thickness cold-rolled steel complying with ASTM A 653 (Type B), with coating designation Z720. The vinyl liner is a flexible polyvinyl material that has a minimum thickness of 20 mils (0.51 mm). Copings are aluminum or PVC. Fasteners are /a-inch-diameter, 1-inch-long (9.5 mm by 25.4 mm), flanged hex, Grade 2, A 307 steel bolts, JS500 coated, with matching hex nuts complying with ASTM A 563 Grade B, D or DH. The overall dimensions, depths and capacities of recognized models are shown in Table 1.

4.0 DESIGN AND INSTALLATION

The Letham International in-ground steel wall swimming pools must be installed in accordance with this report and the manufacturer's published installation instructions. All plumbing and electrical work must comply with the codes In effect at the construction site.

The swimming pools may be installed without a soll investigation by a registered design professional, subject to the code official's approval, provided none of the following conditions is encountered at the site:

- The existence of groundwater within the depth of the pool excavation.
- The existence of uncompacted fill in contact with any 2. portion of the pool.
- The existence of any expansive-type soils. 3.
- The existence of any soil types with an angle of repose that will not support the walls of the excavation at desired slopes.
- Danger to adjacent structures posed by the proposed 5. pool location.
- The existence of any cracks or openings in soil that would not confine sand bedding.
- The setback between pools and slopes does not comply with Section 1805.3.3 of the IBC.

If any of the above conditions are encountered, excavation must cease immediately. The specified conditions at the site must then be reviewed, and recommendations made by a registered design professional. The code official must approve the registered design professional's analysis before work is resumed.

Details specifically for installations in expansive, clay, or adobe soils apply only when supported by the registered design professional's analysis and approved by the code official.

The site for the pool must be initially excavated to the required grade below the vertical wall panel depth. The site must then be overexcavated approximately 2 feet (610 mm) around the perimeter of the pool along its vertical wall panel line to permit installation of the wall panels and back braces. Excavation and fine grading of pool bottom and side slopes must then be completed. Back braces and wall panels must be placed and bolted together. Plumbing and



Page 1 of 72

associated accessories must be installed in accordance with the applicable plumbing code, Normal-weight concrete with a minimum 28-day specified compressive strength of 2,500 psi (17.2 mPa), must be placed behind the panels around the perimeter of the pool 8 inches deep by 24 inches wide (203 mm by 610 mm), including the area behind any walk-in stalicases, to fill the width of the excavation. Additional concrete must be placed at each back brace to a minimum depth of 12 inches (305 mm). A cementitious pool base mix, such as concrete or vermiculite-cement, must be placed over the pool bottom to a depth of 2 inches to 3 inches (51 mm to 76 mm), and troweled to a smooth finish.

Exception: If groundwater is encountered during excavation, a 3-inch-thick (76 mm) layer of 3 /₄-inch-diameter (19 mm) stone must be placed, and then a 3-inch-thick (76 mm) layer of concrete must then be placed over the stone. A 1 /₂-inch-thick (12.7 mm) layer of cementitious pool base mix must be smoothed over the concrete.

The vinyl liner must then be installed in strict compliance with the manufacturer's instructions, to ensure a smooth, waterproof surface that conforms to the pool walls and bottom surfaces. Backfilling behind the pool panels then takes place using clean, porous soils, free of roots and debris, installed and carefully tamped in layers not to exceed 12 inches (305 mm) in thickness to eliminate voids. The backfill placement and filling of the pool with water are to be accomplished concurrently in order to prevent uneven loading on the pool panels and avoid the potential collapse of the pool wall.

5.0 CONDITIONS OF USE

The pools described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The pools must be constructed and installed in accordance with this report and the manufacturer's published installation instructions. In the event of a conflict, this report governs.

- 5.2 Electrical, mechanical and plumbing installations must comply with the applicable codes in effect at the construction site.
- 5.3 Setback between pools and from slopes must comply with IBC Section 1805.3.3, or IRC Section R403.1.7
- 5.4 A barrier must be installed in accordance with IBC Section 3109.4 or IRC Section AG105.
- 5.5 Slip resistance is outside the scope of this evaluation report. Reports of slip resistance tests that demonstrate compliance with Section 8.1 of ANSI/NSPI-5 must be submitted to the code official for approval.
- 5.6 Diving equipment may not be installed.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Vinyl-lined Residential Swimming Pools (AC279), dated October 2005 (editorially revised April 2009).

7.0 IDENTIFICATION

Each pool shell, at the skimmer area, bears a label with the name Latham International; the manufacturing plant location (6930 Gettysburg Pike, Fort Wayne, Indiana); the pool model; a bar code for traceability; and the evaluation report number (ESR-2782).

A permanent sign, bearing the following statement, must be attached to the pool pumping equipment:

Notice: The pool must remain full of water at all times. Pool may be damaged if the water level is allowed to drop below the inlet. When appreciable drawdown is noticed or if it becomes necessary to drain the pool, the manufacturer/pool dealer must be contacted for instructions.

A permanent label must be attached adjacent to the above sign indicating the name, address and telephone number of the Latham International products distributor.

To be absolutely clear, there are *sea water* pools, meaning pools that are filled with ocean water. These are not so common and are typically located right at the coast. Sea water pools require special equipment and surfaces to withstand the very briny 35,000 parts per million (ppm) of salt found in the ocean. There are also additional filtration and maintenance concerns as sea water contains many components (minerals, algae, and other organics) not found in the public tap or well water used to fill most pools.

How Much Salt? (http://www.inyopools.com/blog/wp-content/uploads/2015/03/Blog-lmage-Pool-Salt.jpg)

Salt water pools are quite different, with only about 3,000 ppm of salt. This concentration is below the threshold detectable to human taste buds and will not leave any noticeable salty residue on skin and hair. Liken it to the saline solution used for contact



lenses. So, while bathers may swim and relax oblivious to its presence, the salt is involved in some complex chemical reactions in order to create chlorine.

[Na]⁺ [:Cl:]

(http://www.inyopools.com/blog/wp-content/uploads/2015/03/Blog-Image-Salt-NaCl.jpg)The Science Behind the Salt

Salt is added to pool water in conjunction with the installation of a <u>salt chlorine generator</u>. The generator is comprised of a power supply which is wired at the pool equipment pad and a salt cell which is plumbed inline with the pipe returning water to the pool. Inside the salt cell are coated metal blades which receive a low voltage current. As salt water passes through, electrolysis occurs, splitting the salt and water into hydrogen and hypochlorous acid. This acid replaces the chlorine tablets or granules traditionally used to sanitize pools.

This process repeats indefinitely as the salt converts to acid and then the acid converts back to salt. Salt does not evaporate. Therefore, once the proper ppm of salt is reached, only small amounts of salt are required to adjust levels. Some things that affect salt levels are heavy rain, which dilutes the concentration of salt, or heavy pool usage (think pool party), when a significant amount of water might be splashed out of the pool.

High Quality Chlorine

The chlorine produced by this electrolytic process is less harsh than the traditional "tri-chlor" chlorine used for pools. Chlorine created from salt does not smell like bleach, and is very gentle to skin, hair and swim suits. The water has a softer feel. These are the more aesthetic benefits of using

Get Your FREE 128 Page Pool Care Guide

r a salt chlorine generator. Other pros include not having to buy, handle or store buckets of chlorine. It is also considered to be a purer and therefore healthier form of chlorine, for those interested in limiting their exposure to this potent chemical.

Is Salt Right for You? (http://www.inyopools.com/blog/wp-content/uploads/2015/03/Blog-Image-Aqua-Rite.jpg)

If you're considering a salt pool, here are some factors to weigh. First is the initial expense of the generator. This generally ranges from about \$600 – \$1200 depending on your pool size, and how many bells and whistles you require. Some salt



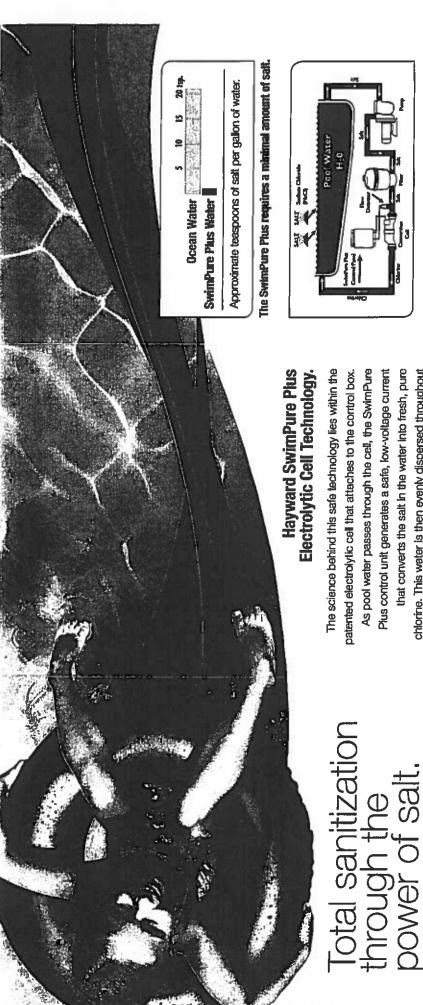
systems include automation to control all of your pool equipment and these can cost considerably more. Energy usage comes into play as well; a salt chlorinator only produces chlorine when the pool pump is running. You will also have the initial expense of many pounds of salt to get the pool up to the proper ppm; once that is done, salt maintenance is typically minimal and not very expensive.

Second, you will need to replace the salt cell, generally every 3 – 5 years. Replacement cell prices are in the neighborhood of \$500 – \$800. If you live in a warmer region where your pool is open year round, you might need to replace the cell more frequently.

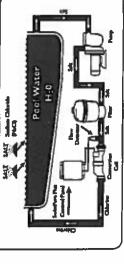
Third, it is important to remember that a salt system replaces chlorine *only*. You still need to adjust for pH, alkalinity, calcium hardness, etc. And shocking your pool is still a necessity when it is enduring summer's heat and high bather loads (this can be done through the "super chlorinate" feature on most salt systems). Some salt pool owners still do supplement with traditional granular shock as using the salt system to shock the pool does decrease cell life.

Fourth, salt can be corrosive to pool equipment and some types of stone decks. It is important to maintain proper salt levels and consider "salt friendly" pool gear. There are rails, ladders (http://www.inyopools.com/Products/013-00020057344.htm) and diving boards (http://www.inyopools.com/boards_srsmith_salt.aspx) designed to be resistant to corrosion. Lights with plastic face rings instead of stainless steel are advisable as well as heaters with cupro nickel (instead of copper) heat exchangers.

All of the above considerations aside, water quality in a properly maintained salt pool is definitely superior in feel, smell and taste. There are more and more pool owners opting for salt chlorine systems every year. Because of this, we have created many Salt Chlorine How to Guides (http://www.inyopools.com/how_to_guides.aspx#SaltChlorineGenerators) so be sure to delve in if you want to learn a whole lot more.



The science behind this safe technology lies within the that converts the salt in the water into fresh, pure As pool water passes through the cell, the SwimPure Plus control unit generates a safe, low-voltage current chlorine. This water is then evenly dispersed throughout the pool via the return jets. The process is as effective as patented electrolytic cell that attaches to the control box. it is safe for added convenience and peace of mind.



Water passes through your pump, filter and heater before entering the SwimPure Plus Electrolytic Cell. Frashly chlorinated water is then returned directly to your pool.

> Plus control box The SwimPure easy-to-read operational mounts near your system delinering

of the sanitization your water needs through common Chlorinator. The SwimPure Plus delivers 100 percent It's possible with the Hayward® SwimPure Plus® Salt

Never buy, mix or measure

chlorine again.



A little salt goes a long way.

one teaspoon of salt per gallon of pool water. Once the salt is added to your Hayward SwimPure Plus allows it to more. The easy-to-read control box SwimPure Plus, including operation operate efficiently on approximately pool, you'll rarely need to introduce displays information regarding the The advanced technology of the status and salt level.



refreshing water you can swim in without limitation.

for gloves. No more chlorine odor or unexpected no more itchy skin. No more red eyes. No need salt, not factory-created chlorine. That means

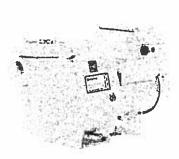
bleaching of toys, clothes or hair. Just natural,

Furbo Cell' CBL-15-SMP

INTELLIFLO® 2 VST VARIABLE SPEED

HIGH PERFORMANCE PUMP













Protected by U.S. Patent No. 7,686,587; 7,815,420; 7,854,597; 8,043,070; 8,469,675; 8,573,952; D568,340; D606,562; D611,430 and Patent Pending and all corresponging foreign counterparts.

Featured Highlights

- Control keypad can be rotated for convenient orientation on the pump or wall mounted with Relocation Kit
- Intuitive, easy to use menu structure for programming and monitoring
- Interfaces perfectly with Pentair automation systems that give you the convenience of mobile device control
- Can be programmed to deliver exactly the speed/flow required for filtration, water features, heating options, ORP and pH testing and dispensing, salt chlorine generators, suction cleaning and spas
- Totally enclosed fan cooled design for quiet operation and long tife
- Top-mounted field wiring compartment makes access and installation easier
- 8-programmable speed settings and built in timer

IntelliFlo 2 VST Variable Speed pump is the next generation of Pentair's variable-speed pump technology. With energy savings up to 90% versus conventional pumps, near-silent operation and advanced programming capabilities, this pump continues to deliver everything a pool owner wants and reliability no other competitor can match.

Ordering Information

Product	Model	Voltage	Full Load Amps	kW	HP	SF	SFHP	FREQ.	Primary Listings and Certifications 5	Port Size (NPT)	Carton Wt. (Lbs.)
			ENCROYE	FFICE	NTVA	HABLE	spatti (NON-SVRS M	ODELI		TARRES.
011055	IntelliFio 2 VST	230	16	3.2	3	1.32	3.95	50Hz/60Hz	UL ', NSF', APSP'	2 in. x 2 in.	55
SER SE		1000		SATE	Α	CCESS	okles	NEW BIE	A Property of		PARKE
520641	IntelliCom 4 - Rat	ed 15 - 240	VAC 15-100 V	DC wit	h 4 inpu	ts				-0.6	В
521109	IntelliCom 2 - Rat	ed 9 - 30 V C	C with 4 inp	uts							-1.
350122	Communication C	able - 50 ft.	- included v	rith pu	mp						2
357154	Chemical Resista	nt Lid							(A. 1887), P. J.	3777	(18 m)
356904Z	Keypad Relocatio	n Kit									2
	APPLY NOT A SEC	THOUSE.	N SEPTE	988¢	100	LFN C	NS			10503030	
1201-D154	2 in x 2 in. Union	2 in. NPT m	ale x 2 ln. fer	male N	PT quic	k conna	cti * No	te: two require	ed per pump (sold individe	ually)	2

- ¹ 'UL' indicates that pump bears a UL mark signifying evaluation to U.S., Standards UL 1081 for Permanently Connected Swimming Poot and Spa Pumps and to Canadian Standards CAN/CSA C22,2 No. 108-01 Liquid
- NSF*indicates that pump bears a NSF mark signifying evaluation to NSF Standard 50 For Self-Priming Centrifugal Pumps For Swimming Pools Only.

Pumps For Swimming Pools Only (Enclosure 3).

- APSP Pump has been evaluated to ANSI/APSP/ICC-15 and California Title 20 and is certified to use on Residential Swimming Pool Filtration Systems.
- Product may have been evaluated to other state and local regulatory standards. Listing status may change, Always confirm status with appropriate agency if in doubt.

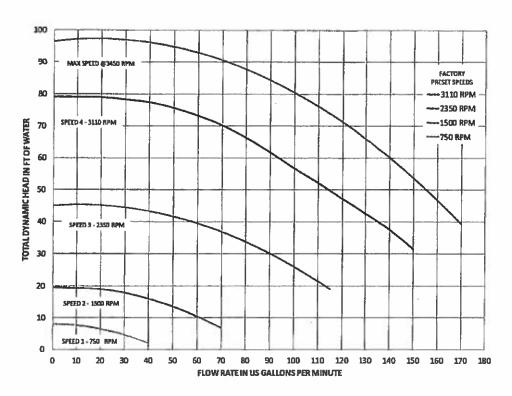
Note: Pump must be used with current collectors when installed on spas or hot tubs in Canada.

Refer to catalog page 43 for a selection of 2-Pole GFCI breakers which offer 6 milliamp personnel protection while meeting 2008 to current NEC Standards for Pool Pumps.

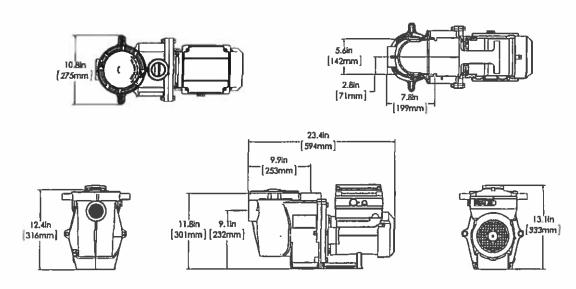
INTELLIFLO® 2 VST VARIABLE SPEED

HIGH PERFORMANCE PUMP (CONT'D)

Dimensions and Performance



Note: IntelliFlo VS+SVRS minimum speed is 1100 RPM



See page 509 for replacement parts.

COMMERCIAL INTELLICHLOR®

SALT CHLORINE GENERATOR

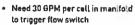
Featured Highlights

- Each single cell produces up to 2 lbs of chlorine per day
- Color LED status displays
- Performance data captured daily
- Automatic shut-off feature helps protect and prolong cell life
- Pre-mounted multi-power center configuration
- Must be used with an external ORP/pH Controller
- Self-cleaning
- NSF listed
- UL Listed









PENTAIR

Power Centers are mounted on PVC boards and pre-wired for 220 VAC and ORP Controller







Must use an external ORP Controller, We suggest 521357 IntelliChem without pumps or Acu-Trol® Systems.

performance as manual chlorine addition without the drawbacks. No need for customers to buy, transport and store chlorine compounds.

IntelliChlor Salt Chlorine Generator uses common table salt to produce all the chlorine a pool needs, safely, effectively, and automatically. Same sanitation

Ordering Information

PART NUMBER	-DESCRIPTION	NUMBER OF PRIMARY IPLAND SECONDARY (SI ICAD CELLS	NUMBER OF PRIMARY POWER CENTERS (520978)	NUMBER DE SECONDARY POWER CENTERS [520554]	CHLORINE PER DAYS (LBS.) ¹
520970	COMSYS-2	1P	1	0	2
520971	COMSYS-4	19, 15	1.00	1	, , .
520972	COMSYS-6	19, 25	1	2	6
520973	COMSYS-8	1P, 3S	1 1 1 1 1 1 1	3	8
520974	COMSYS-10	1P, 4S	1	4	10
520975	COMSYS-12	1P, 5S	1.1	5	12
520976	COMSYS-14	1P, &S	1	6	14
520977	COMSYS-16	1P, 7S	10 M	7	16

[‡] Codes for commercial pools typically require 2 lbs. of chlorine production per every 10,000 gallons. Please consult your local codes for chlorine production requirements.

Note: COMSYS-System includes: Primary Cell, Secondary Cells, Primary Power Center, Secondary Power Centers, and the manifold.

* Call factory for sizing Commercial IntelliChlor systems for pools larger than 80,000 gallons.

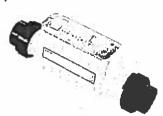
	Product	Description	Carton Oty.	Carton Wt. (Lbs.)
-	AND LEE	COMMERCIAL INTELLICITION SALT CHLORINE GENERALOR FOR UNI	TED STATES	
	521151	InteltiChlor CIC40P Replacement Primary Commercial Cell	1	
	521005	IntelliChlor CIC605 Replacement Secondary Commercial Cell	1	e **
	520978	IntelliChlor IC60P Replacement Primary Power Center	1	
	520556	IntelliChtor Replacement Secondary Power Center	1.5	
	P104-1	IntelliChlor Surge Board with ORP (Commercial)	τ	

For replacement parts please call Technical Service at 1-800-831-7133.

INTELLICHLOR®

SALT CHLORINE GENERATOR







IntelliChlor Salt Chlorine Generator Cell

IntelliChlor Salt Chlorinator uses common table salt to produce all the chlorine a pool needs, safely, effectively, and automatically. Same sanitation performance as manual chlorine addition without the drawbacks. No need for customers to buy, transport and store chlorine compounds.

Featured Highlights

- Full diagnostic capabilities, including cell tile tracking that communicates remaining hours of cell tile in real-time. Captures all performance data daily iproduction settings, hours of operation, chloring output, cell cleaning cycles, salt readings, and water temperature averages!.
- Push-button operation and easy-to-view displays enable last checking of salt levels, cell cleanliness, sandizer output,
- Automatic shut-off feature protects the unit and prolongs cell life under low water temperature conditions
- On-time cycling helps prevent calcium and scale build-up to maximize
 call life.
- Ability to communicate with IntelliTouch®, EasyTouch®, and SunTouch® Automation Systems
- 110 VAC or 220 VAC wiring [110 VAC only for IC15]
- · include 2 in, unions (fC15 unions adapt to 1 1/2 in.)
- Certified to UL, 1081 standard for safety
- NSF approved
- Health Canada approved

Ordering Information

Product	Description	Carton Qty.	Carton Wt. (Lbs.)
SEE THE	INTELLIGHEORSALT CHEORINE GENERATOR FOR UNITEDSTA	TFS.	
520888	IntalliChlor IC15 Celt for Smaller Pools (US Version) - includes External Power Supply		
^{SF} 521171	InteltiChlor Replacement External Power Supply for IC15		
570554	IntelliChlor IC20 Cell (US Version)	S 1	7
520555	IntelliChlor (C40 Cell (US Version)	1	14
521105	IntelliChlar IC60 Cell (US Version)	1	18
520556	IntelliChlor Power Center (US Version)	1	13
建物的	INTELLICHLOR SALT CREORINE SETERATOR FOR CANADA		
522109	IntelliChlor IC15 (Canadian Version)	1	9
520911	IntelliChlor IC20 Cell (Canadian Version)	1	7
520912	IntelliChlor IC40 Cell (Canadian Version)	1.	14
520910	IntelliChlor Power Center (Canadian Version)	1	14
	NTELLICIPLOR SALT CHLORUE GENERATOR ACCESSORIES		
520588	IntelliChlor pess-through cell for winter or start-up	1	3
520594	IntelliChlor diagnostic wand	1	° 1
520595	IntelliChlor replacement unions (contains 2 O-rings, 2 couplers, 2 nuts)	1	1
520670	IntelliChlor Acid Washing Kit (includes closed-end union cap, D-ring, and coupling nut)	1	1
520734	15 foot extension power cord	1	1
520736	IntelliChlor Flow Switch replacement kit	1	1
521147	IntelliChlor Orings - Pack of Ten	1	1
521248Z	IntelliChlor Power Center luse holder replacement w/fuse 10A 250V	1 1 1	· 1
521034Z	IntelliChlor Power Center PC108 surge board replacement	1	1
521377	IntellipH canister with controller	1	18 .
521495	IntelliChlor (C15 Replacement Reducer Unions - 2 in. to 1-1/2 in. (contains 2 0-rings, 2 couplers, 2 nuts)	1	1
521633	IntelliChlor Debris Cross Guard - Pack of 5	.1	1 :
10010	IntelliChlor Power Center fuse for IC15 (1A 250V)	1	1
10006	IntelliChlor Power Center fuse for IC20, IC40, IC40 [10A 250V]	v v1	L 13
522745	IntelliChlor Power Center automotive style fuse replacement (IDA/ 58V Mini-blade)	5	1
522431	IntelliChlor Surge Board PC100 Europa	f	7000

CLEAN & CLEAR® PLUS FILTERS

FIBERGLASS REINFORCED POLYPROPYLENE TANK

Featured Highlights

- NSF listed
- Superior strength
- Large filter area for increased dirt capacity
- 1-1/2 in., 100% drain clean-out port
- Continuous High Flow[™] Internal Air Relief *
- Base and plumbing kits now available
- Injection molded tank
- · Balanced hydraulic flow
- Tension Control® Clamp
- 100% factory tested
- · Black bulkhead unions
- . High Flow manual air relief valve









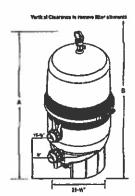
Clean & Clear Plus Filters have a corrosion resistant injection molded filter tank featuring superior strength and reliability. The cartridge assembly uses four easy to clean, non-woven, polyester cartridges. Each filter is supplied with a bulkhead union set for easy installation.

Ordering Information

	Product	Model	Effective Filtration Area (Sq. Ft.)	Flow Rate ² (GPM Res)	8 Hour	Turnover Capacit (in Gallons) 10 Hour	n Gallons) Carton Qty.		Carton Wt. (Lbs.)
Tis				CLEAN & CLE	AR FLUS FLT	IRS	Service Text		
7	140310	CCP240	240	70	43,200	54,000	64,800	1	60
	160340	CCP3201	320	120	57,600	72,000	84,400		70
	160301	CCP420 1	420	150	72,000	90,000	108,000	. 1	60
	160332	CCP5201	528	150	72,000	90,000	109,000	1	90

¹ NSF Listed.

Residential rate .375 GPM per sq. ft. of filter area.



Dlm	ension '	Table
Model	A Dim.	B Oim.
160310	37*	56"
160340	43"	62"
160301	49~	68.
160332	56"	74"



Dimensions and Performance

Note: Actual system flow will depend on plumbing size and other system components.

Note: Pentair Aquatic Systems does not recommend flow rates above 150 GPM.

 Integrated continuous High Flow internal air relief is operational only when there is unobstructed flow in the circulating system.

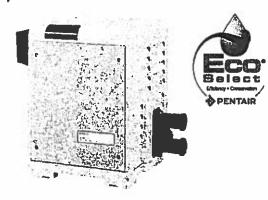
Note: Operating Limits - maximum continual operating pressure of 50 PSI, Pool/spa (bather) applications, maximum operating water temperature (internal filter) 104°F (40°C).

See page 377 for replacement parts.

MASTERTEMP® HEATER

HIGH PERFORMANCE ECO-FRIENDLY HEATERS





MasterTemp High Performance Heater

Featured Highlights

- Heats up fast so no long waits before enjoying your pool or spa
- Best-in-class energy efficiency*
- Manual gas shut-off when service is required
- Eco-friendly MasterTemp Heater is certified for low NOx emission and outperforms industry standards
- · Rotating digital display allows for easy viewing
- Tough, rustproof exterior handles the heat and weathers the elements
- · Certified for ouldoor and indoor installations
- For Air Intake Kit order part number 461031

MasterTemp heaters offer all the efficiency, convenience and reliability features you want in a pool heater, plus a lot more. As easy to use as your home heating system, plus, user-friendly indicator lights make system operation and monitoring a snap. The compact design and super-quiet operation won't intrude on your poolside leisure time. Heavy-duty (HD) unit with cupronickel exchanger stands up to the harshest of applications, like low pH, high flow or heavy use.

Ordering Information

Product	Gas Type	BTU (000's)	Carton Qty.	Carton Wt.
810 J. 300		MASTERTEMP HEATERS		
460792	Natural	175		128
460793	Propane	175	1	128
460730	Natural	200	1	128
460731	Propane	200	1	128
461000	Natural	200 ASME	1	138
461001	Propane	200 ASME	1	138
460732	Natural	250	1	133
460733	Propane	250	i	133
460771	Natural	250 ASME	1	140
460772	Propane	250 ASME		140
461020	Natural	250 ASME HD	1	140
460906	Natural	250HD	1	136
460734	Natural	300	1	136
460735	Propane	300		136
460736	Natural	400	1	136
460737	Propane	400	1	136
460805	Natural	400HD	1	136
460775	Natural	400ASME	a (1961) a	149
461021	Natural	400 ASME HD		149
460776	Propane	400ASME		149

Note: The MasterTemp Heater is certified for low NOx emissions.

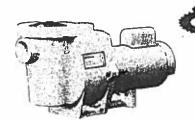
Heavy Duty (HD) Cupro-Nickel Heat Exchanger 82% Efficient.

Standard Copper Heat Exchanger 84% Efficient.

WHISPERFLO®

HIGH PERFORMANCE PUMPS







Featured Highlights

- Oversized strainer basket and volute industry standard in pool pumps
- Standard and Energy-efficient Square Flange Motors available
- Lower HP's deliver higher performance than industry standard
- Compatible with all cleaning systems, various filters and jet action spas
- · Heavy-duty/durable construction is designed for long life
- Designed for residential and commercial applications
- New motor increases life, energy, efficiency, ease of installation and better cooling for long service life

WhisperFlo High Performance Pumps

Robust thermoplastic with the Cam & Ramp* See-Through Lid design. Self-priming, high flow with Funnel-Flo* Diffusers. 2 in. suction and discharge ports. Motor features threaded shaft and durable commercial duty 56 frame motor with NEMA Rated square flange.

Ordering Information



Energy Star Certified Models in blue

Product	Model	Voltage	Full Load Amps	HP	SF .	SFHP	Primary Listings and Certifications 4	Port Size (NPT)	Carton Wt. [Lbs.]	Curv
			ENER	GY EFF	CIENT	នារាចុរៈ ន	PEED FULL RATED 🕟		4 14	
011511	WFE-2	115/208-230	8.8/4.5-4.4	1/2	1.90	0.95	UL 1, NSF 2, APSP	2 in_ x 2 in.	41	£
D11512	WFE-3	115/208-230	12.8/7.0-6.4	3/4	1.67	1.25	UL1, NSF2	2 in. x 2 in.	41	F
031513	WFE-4	115/208-230	14.8/7.B-7.4	1.1	1.65	1.45	UL¹, NSF²	2 in. x 2 in.	46	G
011514	WFE-6	208-230	9.6-8.8	1-1/2	1.47	2.20	UL1, NSF2	2 in. x 2 in.	54	Н
011515	WFE-8	208-230	11.0-10.2	2	1.30	2,60	UL1, NSF?	2 in. x 2 in.	55	1
011516	WFE-12	208-230	15.D-13.6	3	1.15	3.45	UL1,NSF2	2 in. x 2 in.	56 🚉	J.
			ENE	RGY EF	FIGIEN	T GINGLE	SPEED UP RATED 💎 🧽	,		· 1
011517	WFE-24	115/208-230	12.8/7.0-6.4	1	1.25	1.25	UL1, NSF2	2 in. x 2 in.	41	F
011518	WFE-24	115/208-230	14.8/7.8-7.4	1-1/2	1.10	1.65	UL1, NSF2	2 in. x 2 in.	46	G
011519	WFE-28	208-230	9,6-8.8	2	1.10	2.20	UL1, NSF?	2 in. x 2 in.	54	Н
011520	WFE-30	208-230	11.0-10.2	2-1/2	1.04	2.40	UL1, NSF ²	2 in. x 2 in.	55	F
			STANDA	RD EST	CIENC	riawa r	SELED COLL RATED		SAFE SEE	Maring.
011578	WF-2	115/208-230	10.8/5.2-5.4	1/2	1.95	0.95	UL', NSF . APSP	2 in. x 2 in.	41	E
011579	WF-3	115/208-230	13.2/6.2-6.4	3/4	1.67	1.25	UL1,NSF1	2 in. x 2 in.	41	F
011580	WF-4	115/208-200	16.0/7.8-8.0	1	1.65	1.65	UL!, NSF2	2 in. x 2 in.	46	G
011581	WF-6	115/208-230	21.0/10.0-10.5	1-1/2	1.50	2.25	UL! NSF#	2 in. x 2 in.	54	$\mathbb{R} \in \mathbb{H}_{\mathbb{R}}$
011582	WF-8	208-230	11.5-11.0	2	1.30	2.60	UL ¹ , NSF*	2 in. x 2 in.	55	- 1
011583	WF-12	230	14.1	3	1.15	3.45	UL1, NSF1	2 in. x 2 in.	56	J
经营业	2 P. S. S.	1.50	STAND	ARD EI	FICIEN	CYSING	FISHED UP RATED	ALL STREET		\$57\b
011771	WF-23	115/208-230	10.8/5.2-5.4	3/4	1,24	0.93	UL!, NSF ²	2 in. x 2 in.	41	Ε
011772	WF-24	115/208-230	13.2/6.2-6.6	1 12	1.24	1.24	UL!, NSF1	2 in. x 2 in.	41	F
011773	WF-26	115/208-230	16.0/7.8-8.D	1-1/2	1.10	1.65	UL!, NSF*	2 in. x 2 in.	46	G
011774	WF-28	115/208-230	21,0/10.0-10.5	2	1.10	2.20	UL', NSF2	Zin. x Zin.	54	H
011775	WF-30	208-230	11.5-11.0	2-1/2	1.04	2.60	UL ¹ , NSF*	2 in. x 2 in.	55	
ROLL BE			100	THREE	-PHAS	E TELOS	MPER-DUTY		7/64/27/25	125
011641	WFK-4	208-230/460	4.9-4.5/2.3	1	1.65	1.65	NSF ¹	2 in. x 2 in.	46	- 6
011642	WFK-4	208-230/460	6.4-6.3/3.2	1-1/2	1.47	2.21	NSF1	2 in. x 2 in.	AB .	н
011643	WFK-8	208-230/460	7.5-7.2/3.6	2	1.30	2,60	NSF?	2 in. x 2 in.	51	- 1
D11644	WFK-12	208-230/460	9.8-9.4/4.7	3	1,15	3.45	NSF*	2 in. x 2 in.	50	, i j

WHISPERFLO®

HIGH PERFORMANCE PUMPS (CONT'D)

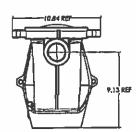
Product	Model	Voltage	Full Load Ampa	HP	SF	SFHP	Primary Listings and Certifications 4	Port Size (NPT)	Carton Wt. (Lbs.)	Curve Key
355 A		FIL	REVERENCE NO	IWO SP	EF D 34	50 RPM, L	DW SPLED 1725 RPM FUL	RATED		
012530	WFDS-3	115	14.6/4.7	3/4	1.67	1.25	UL', NSF2, APSP3	2 in. x 2 in.	42	A, F
G114B6	WFD5-4	230	7.8/3.0	1	1.65	1.65	UL!, NSF1, APSP1	2 in. x 2 in.	47	B, G
011522	WFDS-6	230	10.0/3.5	1-1/2	1.47	2,20	UL 1, NSF 2, APSP 3	2 in, x 2 in,	55	C, H
011523	WFOS-8	230	11.0/4.0	2	1.30	2.60	UL 1, NSF 1, APSP 1	2 in. x 2 in.	56	D, I
	120000	I N	ERGYELFICIEN	TWOS	ero a	SURPM:	OW SPEED 1725 RPM UP	RATED	With the second	
012485	WFDS-24	115	14.6/4,7	1	1.25	1.25	UL1, NSF1, APSP1	2 in. x 2 in.	42	A, F
012516	WFDS-26	230	7.8/3.0	1-1/2	1.10	1,45	UL1, NSE2, APSP1	2 in, x 2 in.	47	B, G
011524	WFDS-28	230	10.0/3.5	2	1,30	2.20	UL', NSF ² , APSP ³	2 in. x 2 in.	55	C, H
น11525	WFDS-30	230	11.0/4.0	2-1/2	1.04	2.60	UL1, NSF 4, APSP1	2 in, x 2 in,	56	D,I
			FNERGY ELFICIE	ENTSIN	SLE PH	ASE - SUH	Z INPUT POWER ERECUT	NCY		
347926	WFEL-2	240/120	7.5/15.D	1/2	1.10	0.55	UL1, NSF1	2 in. x 2 in.	41	
347927	WFEL-3	240/120	7.5/15.0	3/4	1,10	0.83	UL1,NSF2	2 in. x 2 in	41	
347928	WFEL-4	240/120	6,9/13.8	1	1,10	1.10	UL!, NSF2	2 in, x 2 in.	46	
347929	WFEL-6	240	7.2	1,5	1.10	1.65	UL!, NSF ²	2 in. x 2 in.	54	
347930	WFEL-8	240	9.4	2	1.10	2.20	UL1, NSF2	2 in. x 2 in.	55	

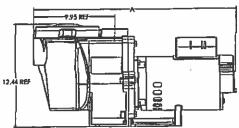
11201-8154 2 in. x 2 in. Union (2 in. NPT male x 2 in. female NPT quick connect) *Note: two required per pump (sold individually 357156 Cover/Lid, Chemical Resistant, CAM & RAMP

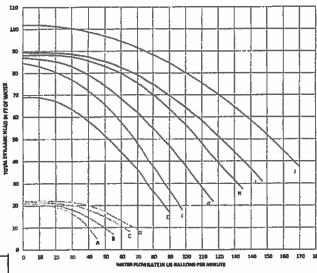
- * 'UL' indicates that pump bears a UL mark signifying evaluation to U.S. Standards UL:1081 for Permanently Connected Swimming Pool and Spa Pumps and to Canadian Standards CAN/CSA C22.2 No. 108-01 Liquid Pumps For Swimming Pools Only (Enclosure 3).
- NSF indicates that pump bears a NSF mark signifying evaluation to NSF Standard 50 For Sett-Priming Centrifugat Pumps For Swimming Pools, Spas and Hot Tubs
- ³ 'APSP' Pump has been evaluated to ANSI/APSP/ICC-15 and California Title 20 and is certified to use on Residential Swimming Pool Filtration Systems.
- Product may have been evaluated to other state and local regulatory standards, Listing status may change. Always confirm status with appropriate agency if indoubt.

Dimensions and Performance

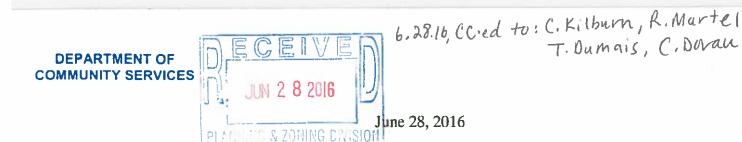
A- VARYING LENGTH			
HP	STD EFF	EE	TEFC
.5	Z3.64	24.41	
.75	23.44	24.41	
11	24.03	24.45	21.5
1.5	25.64	25.16	21.5
2	25.64	25.66	21.81
2.5	25.64	25.64	
3	25.64	25.44	27.41







See page 514-515 for replacement parts.



TO:

Catherine Dorau, Associate Planner

FROM:

Charles R. Guarino, Civil Engineer II

SUBJECT:

114 Waterside Lane

Based on my review of the plans titled "Wetland Regulated Activity Zoning Location Map Dependent Resurvey Prepared for: Linda H. Goldfarb, et al 114 Waterside Lane West Hartford, Connecticut Scale: 1"=30" Date 06/09/16", I offer the following engineering comments:

- 1. The plans shall include a detail of the proposed retaining wall.
- 2. The plans shall include a cross-section of the proposed 3' to 4' wide berm including the height.
- 3. The bottom of the proposed pool is at elevation 95 (assumed datum) to allow for gravel and sand below the liner the excavation will be down to approximately elevation 94. The water surface elevation of Wood Pond must be labeled on the plans. If the bottom of the pool excavation elevation is below the pond water surface elevation a dewatering plan is required.
- 4. The existing fence is to remain and no proposed work is shown east of the existing fence therefore the proposed silt fence needs to be located on the uphill side (west side) of the existing fence.
- 5. The existing patio and stone wall extend north of the house line (near the northeast corner of the house) which may limit access to the backyard. The plans need to be revised to show the patio and wall.
- 6. The temporary stockpile area is not large enough to accommodate the soil from the entire pool excavation. Either the temporary stockpile area needs to be enlarged or the excavated material should be loaded directly into dump trucks and removed from the site.

CRG:sr

C: Duane J. Martin, P.E., Town Engineer



Town of West Hartford Conservation and Environment Commission (CEC) Meeting Minutes June 27, 2016, 7:00 PM Town Hall, Room 314

Present: Commissioners: Brian McCarthy (Chair), Chen Lu, Matt Macunas (Quorum not met)

- 1. The May 2016 CEC Meeting Minutes were approved (on Motion by Matt, Second by Lu).
- 2. Communications and News: No news to report. Commissioners are reminded to provide more advanced notice prior to missing a meeting.
- 3. New Business:

1344 New Britain Avenue- Application (IWW #1046) of NB Asset Management, LLC, Brandon Handfield, P.E., (Eleanore M. Leary Estate, c/o John Leary III, R.O.) seeking approval of an Inland Wetlands and Watercourses Permit to conduct certain regulated activities which may have an adverse impact on a wetland and watercourse area. The applicant seeks to construct two (2) single-family homes as part of a proposed subdivision. The two lots are located across the street (New Britain Avenue) from Wolcott Park which has wetland soils per the Town map. One of the driveways and part of the site development for both homes falls within the 150 ft. upland review area. (Submitted for IWWA receipt on July 6, 2016.)

-Applicant not present- Application was not discussed

114 Waterside Lane- Application (IWW #1047) of Haz-Pros, Inc., Clayton Kilbourn, President, (Linda Goldfarb, R.O.) requesting approval of an Inland Wetlands and Watercourses Permit to conduct certain regulated activities which may have an adverse impact on a wetland and watercourse area (Wood Pond). The applicant proposes to install a waterfall and an in-ground salt water pool approximately 22' x 36' with a masonry paver patio and walk. The proposed activity is within the 150 ft. upland review area. (Submitted for IWWA receipt on July 6, 2016.)

The applicant proposes to build a pool with a surrounding patio in the backyard of 114 Waterside Lane. The pool will measure 560 square feet, contain 20,000 gallons of water, with a maximum depth of 8 feet. There will be an adjoining waterfall next to the pool. The pool is anticipated to be a salt water pool, which will initially require 600-700 pounds of salt. The pool is chlorinated by an electrical method that derives chlorine from salt by running a current through the salt and water mixture.

The back of the property slopes down from the house to Wood Pond. The pool and adjoining patio are proposed to be constructed near the bottom of the slope and roughly

30' from Wood Pond. The applicant claims that the proposed pool site is the most reasonable and prudent location because it is relatively flat. As a result, he believes it would create the least disturbance to the property. The applicant proposes to build a 3-4 feet wide vegetated bed (details were not given in the application of this feature) roughly 70 feet long, between the patio and Wood Pond, to intercept runoff from the pool and patio into Wood Pond (no specifics as-to how this would occur were given). The applicant communicated to the commission that all soil from the excavation for the pool will be disposed off-site. The applicant communicated that if any leaks stem from the liner of the pool, the water will be pumped out by truck rather than being drained onto the lawn or into the pond, although this is not documented on the plans.

Based on the foregoing, the Commission has concerns that the pool installation specification (submitted as part of the application) requires the bottom of the pool elevation to be above the water table (we would require the estimated seasonal high water table elevation). The applicant does not, however, know the depth of the water table at the proposed pool site. Given the close proximity between the proposed pool site and Wood Pond, the commission suggests the applicant to provide the depth to water table elevation at the proposed pool/patio location. This groundwater elevation determination should require a screened PVC well pipe, roughly 1" diameter, to be set at a depth of 10' below surface grade and allowed to sit overnight and subsequently measured the following morning.

According to the manufacture's specification for the Pool, having the substructure of the pool above the water table will protect the integrity of the pool structure and thus we believe reduce the chances of pool material failures that would cause chlorinated pool water to drain into the adjacent Wood Pond. Accordingly, the Commission recommends that the applicant conduct a test boring in the pool location and provide the information to the CEC and or West Hartford Inland Wetlands Commission.

4. Motion for Meeting Adjournment approved (on Motion by Macunas, Second by Lu,) at 8:21pm.



LINDA H. GOLDFARB

114 Waterside Lane West Hartford, CT 06107

June 24, 2016

Catherine Dorau, Associate Planner Town of West Hartford Department of Community Services Planning and Zoning Division 50 South Main Street West Hartford, CT 06107

RE: 114 Waterside Lane, West Hartford

Dear Ms. Dorau:

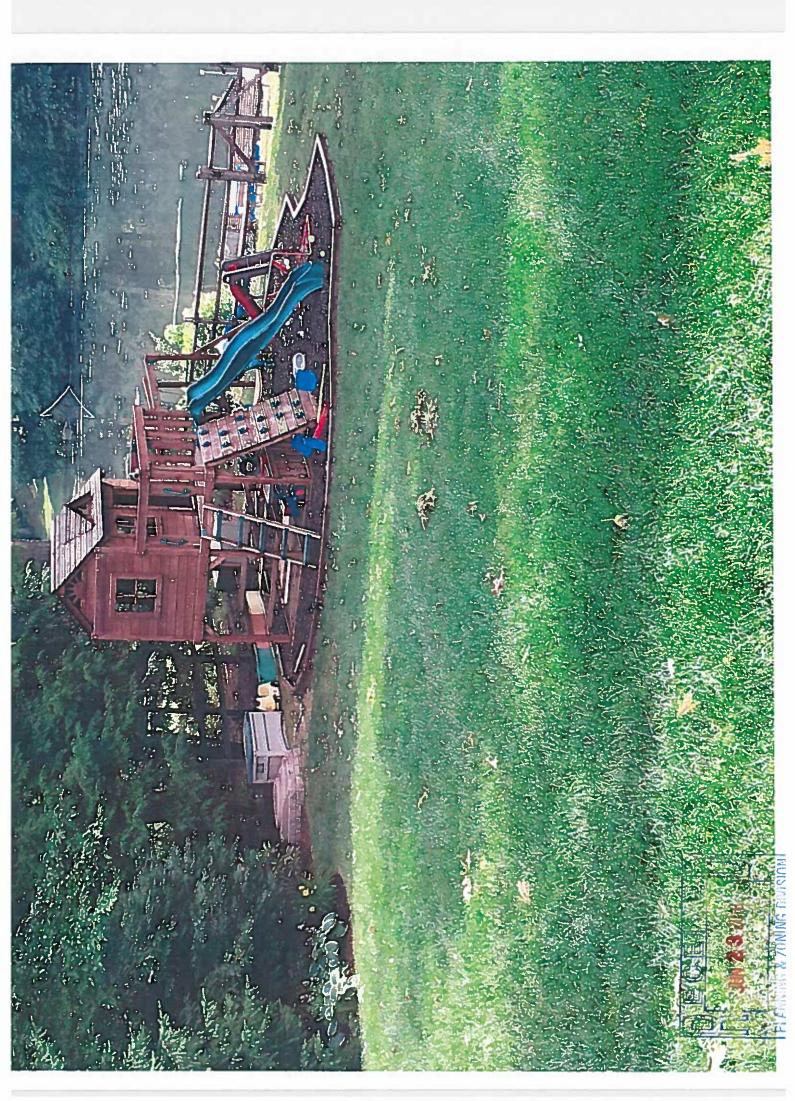
I am the owner of 114 Waterside Lane, West Hartford, CT 06107. I am writing this letter to formally authorize Haz-Pros, Inc., Clayton Kilbourn, President, 125A Brook Street, West Hartford, CT 06110 to represent me in any meetings regarding the proposed construction of a pool at my home. I also approve and consent for Haz-Pros, Inc. to carry out such renovations and construction as is authorized by the Town of West Hartford.

Please let me know if you require any other information.

Thank you for your attention and assistance.

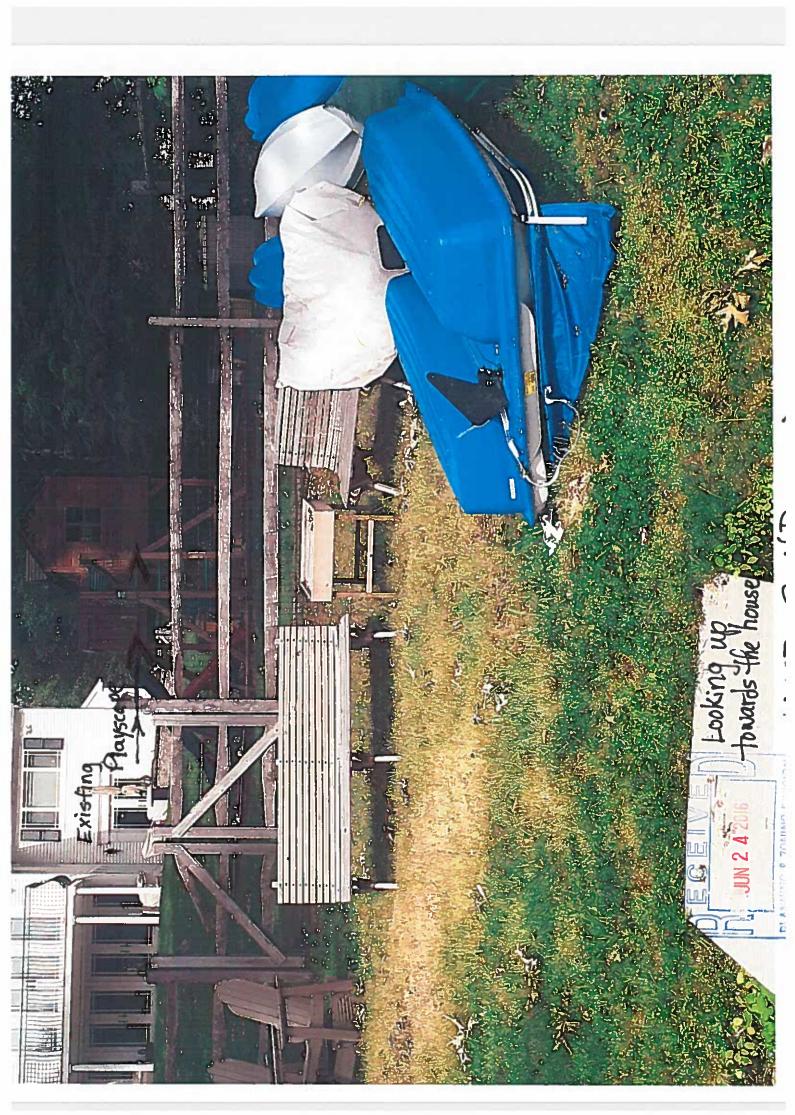
Sincerely,

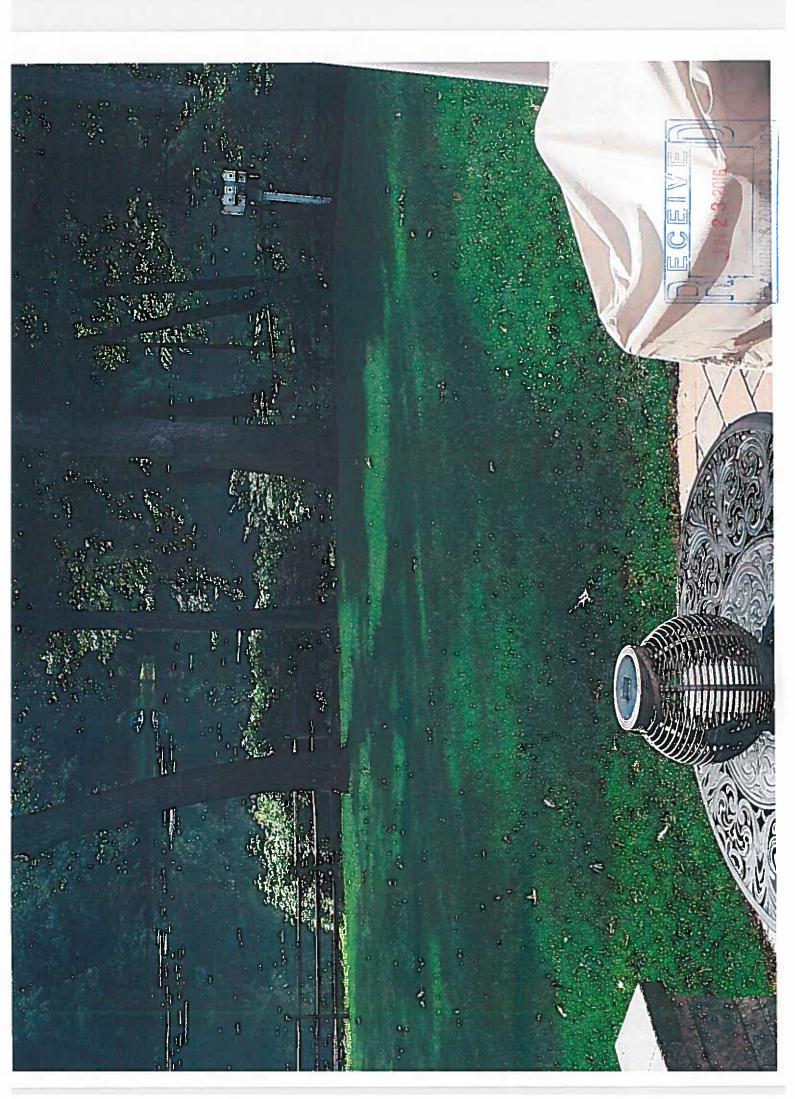
Linda H. Goldfarb

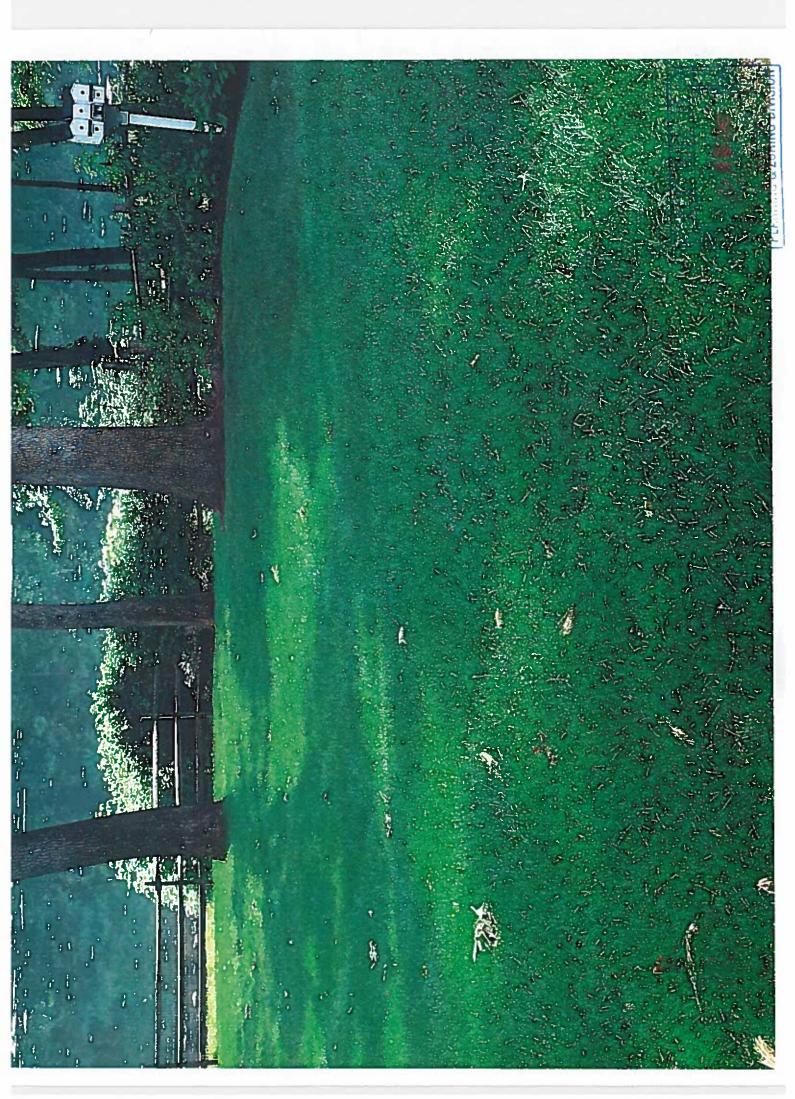




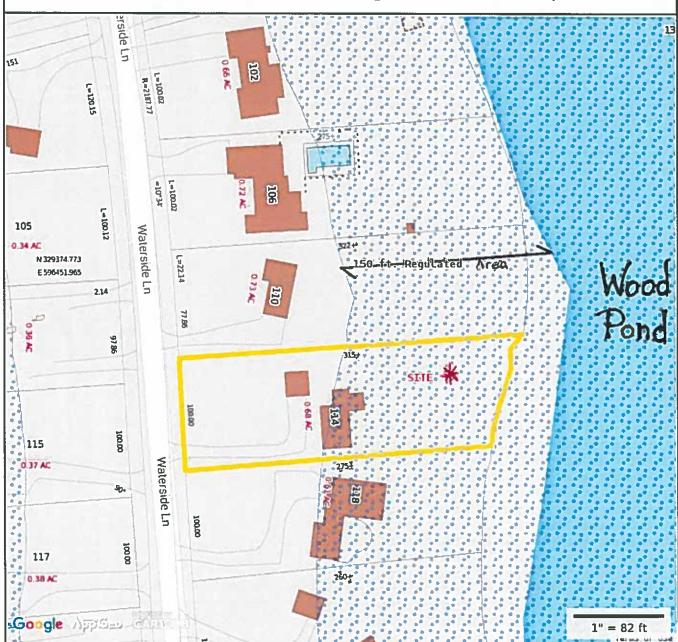








114 Waterside Lane - Existing Town Wetland Map



Property Information

Property ID 5951 2 114 0001

Location Owner 114 WATERSIDE LANE GOLDFARB LINDA H +



MAP FOR REFERENCE ONLY NOT A LEGAL DOCUMENT

Town of West Hantford, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated 5/22/2015 Properties updated Daily